

## **STUDY OF CORONAL MASS EJECTIONS IN RELATION WITH GEOMAGNETIC ACTIVITY AND COSMIC RAYS**

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The coronal mass ejections (CME) is the most energetic phenomena of the sun, involving energies of up to  $10^{25}$  J, and the resulting interplanetary disturbance represents a significant perturbation to the density and the magnetic structure of the solar wind. These events are now considered to be the major source of transient interplanetary disturbances and shocks, causing geomagnetic activity and cosmic ray intensity variations. In this work, we have studied the relation of coronal mass ejection with various solar and interplanetary features. The study is confined to the interval from 1986 to 1992, covering the ascending phase of solar activity cycle 22. It is found that the both coronal mass ejection with solar flares or without solar flares can produce geomagnetic activity. It is also concluded that, the CMEs in association with B-type solar flare might be the reason for the enhancement of geomagnetic activity. Further analysis of CME events indicate its better association with cosmic ray decreases. It seems that CME events (with or without solar flares) also play crucial role in producing cosmic ray modulation in interplanetary medium.